KP Combine

And Safety Co.,Ltd.

TORQUE LIMITERS

Characteristic

They can easily be adjusted to slip at a disired overload, auto matically re-engaged when overload is removed.

Overload should be removed promptly since prolonged slippage can be detrimental to the friction disc.

No resetting generally is required after the Torque Limiter has slipped. Torque Limiters prevent machine damage, product damage and costly down time caused by shock loads, overloads or machine jams.

They should be used as clutches or to prevent personal injury.

Torque Limiters are primarily for use with sprockets, gears and pulleys.

Selection

When the torque at which the divice should slip is determined, simply choose a Torque Limiter from Table, which has a maximum torque rating as great as or greater than the required torque. Check to see if required bore is available. It is good practice to select the Torque Limiter with a maximum torque rating reasonably greater than the required torque if possible.

Torque Limiters should not be used on High Speed Drivers.

Torque Limiter Adjustment

Adjustment of Torque Limiters is simple and positive.

Only and open and wrench and a socket head set screw wrench are needed.

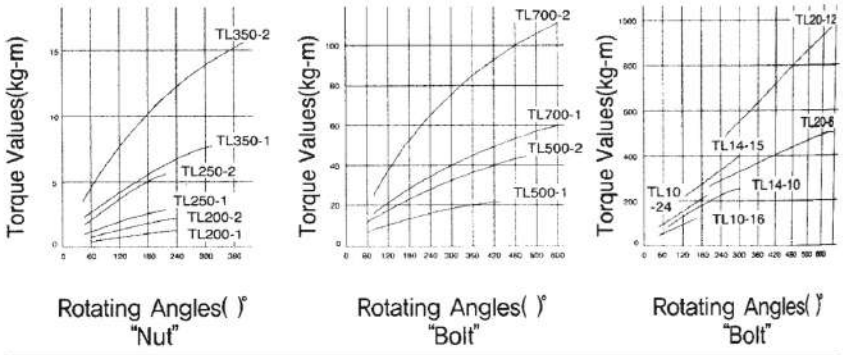
: Back-off the three cap screws until the points are recessed in the threaded adjusting collar.

: Tighten the threaed adjusting collar by hand and then tighten the cap screws with an open end wrench until the heads bottom.

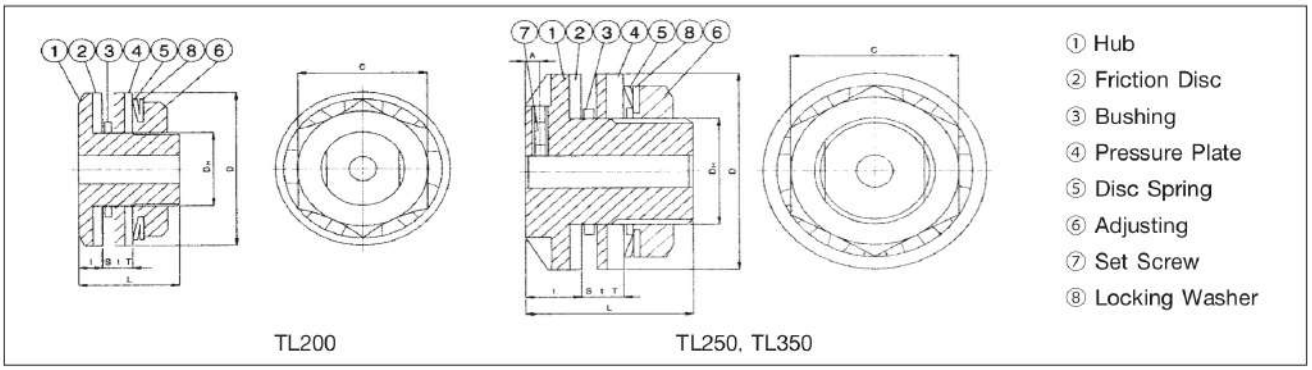
: Try the unit in its application and if further adjustments is necessary, loosen cap screws until points are recessed in the adjusting collar. Torque can also be checked by applying tension to one strand of chainwith a spring scale or other means.

: Tighten or loosen the adjusting collar as needed, then retighten the cap screws until the heads bottom

Torque Values Rotating Angles

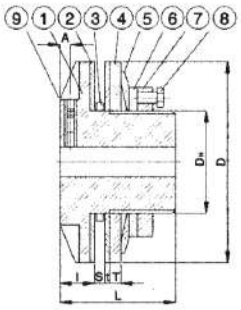


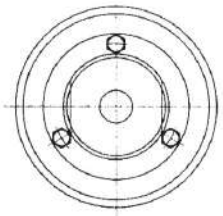
Structure and Dimensions



SIZE	Basic torque (kgf.cm)	Finished Bore (H10)	Max. Bore Dia	Bushing		Driver Member Bore	Dimensions (mm)											
				Width	Out Dia		D	DH	L	I	T	t	S (Max)	A	C	⑥	⑦	Weight (kgf)
TL-200-1	0.3~1	8	14	3.8	30 $^{-0.024}_{-0.049}$	30 $^{+0.03}_{-0}$	50	24	29	6.5	2.6	2.5	7	-	38	M24 x1.0	-	0.2
TL-200-2	0.7~2			6.0													-	0.2
TL-250-1	0.7~2.8	10	22	4.5	41 $^{-0.010}_{-0.045}$	41 $^{+0.05}_{0}$	65	35	48	16	4.5	3.2	9	4	50	M35 x1.5	M5	0.5
TL-250-2	1.4~5.5			6.5														
TL-300-1	2.0~7.6	17	25	4.5	49 $^{-0.025}_{-0.065}$	49 $^{+0.05}_{0}$	89	42	62	19	4.5	3.2	16	6	63	M42 x1.5	M5	1.2
TL-350-2	3.5~15.2			9.5														

MIDDLE SIZE
TORQUE LIMITER

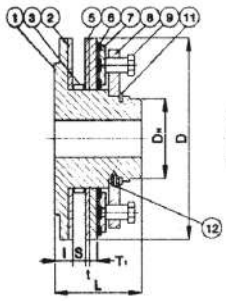


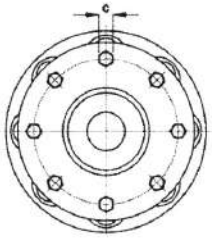


① Hub
② Friction Disc
③ Bushing
④ Pressure Plate
⑤ Disc Spring
⑥ Adjusting
⑦ Set Screw
⑧ Locking Washer

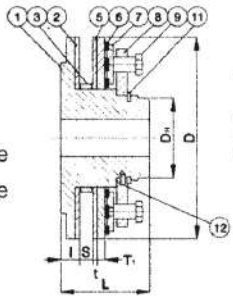
SIZE	Basic torque (kgf.cm)	Finished Bore (H10)	Max. Bore Dia	Bushing		Driver Member Bore	Dimensions (mm)											
				Width	Out Dia		D	DH	L	I	T	t	S (Max)	A	⑦	⑧	⑨	Weight (kgf)
TL-500-1	4.8~21.4	20	42	6.5	74 $^{-0.05}_{-0.10}$	74 $^{+0.05}_{0}$	127	65	76	22	5.7	3.2	16	7	M65 x1.5	M8 x1.5	M8	3.0
TL-500-2	9~42.9			9.5														
TL-700-1	11.8~58.1	30	64	9.5	100 $^{-0.010}_{-0.045}$	41 $^{+0.05}_{0}$	178	95	98	24	7.7	3.2	29	8	M95 x1.5	M35 x1.5	M10	6.7
TL-700-2	22.8~110.6			12.5														

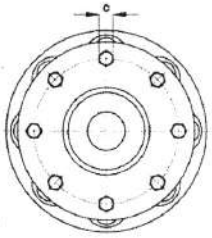
LARGE SIZE TORQUE LIMITER





① Hub
② Friction Disc
③ Bushing
④ Pressure Plate
⑤ Pressure Plate
⑥ Disc Spring





⑦ Spring Plate
⑧ Pilot Plate
⑨ Adjusting Bolt
⑩ Snap Ring
⑪ Snap Lock
⑫ Spring Pin

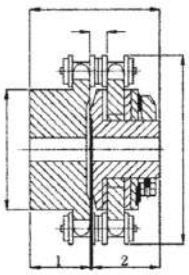
SIZE	Basic torque (kgf.cm)	Finished Bore (H10)	Max. Bore Dia	Bushing		Driver Member Bore	Dimensions (mm)											
				Width	Out Dia		D	DH	L	I	T	T1	T2	t	S (Max)	C	⑨	Weight (kgf)
TL-10-16	40~130	30	72	12.5 15.5 19.5	135 $^{-0.085}_{-0.125}$	135 $^{+0.07}_{0}$	254	100	115	23	15	15	-	4.0	24	19	M24 x1.0	0.2
TL-10-24	60~190																	
TL-14-10	90~272	40	100	15.5 19.5 23.5	183 $^{-0.07}_{-0.12}$	183 $^{+0.07}_{0}$	356	145	150	31	13	13	13	4.0	29	27	M35 x1.5	0.5
TL-14-15	200~400																	
TL-20-6	250~500	50	130	15.5 19.5 23.5	226 $^{-0.07}_{-0.12}$	266 $^{+0.07}_{0}$	508	185	175	36	15	15	18	4.0	31	36	M42 x1.5	1.2
TL-20-12	470~950																	

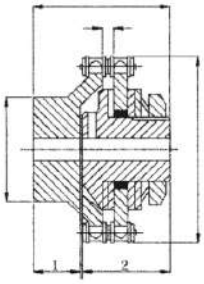
TORQUE LIMITER COUPLING

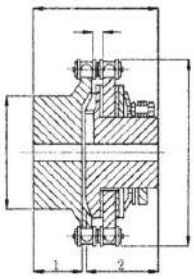
Dimension Torque Limiter Couplings

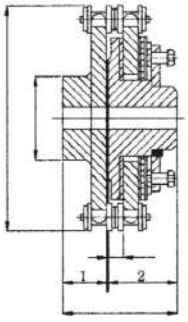
Torque Limiter Coupling is a exible Coupling which consists of a torque limiter and a special type steel sprocket connected with a steel double roller chain.

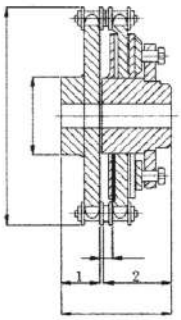
Easily centering and simply installation.

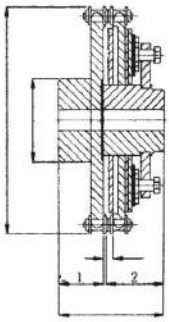

TL200-C


TL250-C, TL350-C


TL500-C, TL700-C


TL10-C


TL14-C


TL20-C2

Size No.	Rated torque (kgf.cm)	Max. RPM	Finished Bore (H)		Max. Bore		Approcated Sprocket	Dimensions (mm)						Weight (kgf)
			Sprocket	Torque	Sprocket	Torque		D	DH	L	ℓ_1	ℓ_2	S	
TL-200-1C	0.3~1	1200	8	8	8	8	#40-16T	76	50	55	24	29	7.4	1.0
TL-200-2C	0.7~2.0													
TL-250-1C	0.7~2.8	1000	13	10	13	10	#40-22T	102	56	76	25	48	7.4	2.0
TL-250-2C	1.4~5.5													
TL-350-1C	2.0~7.6	800	12	17	12	17	#50-24T	137	72	103	37	62	9.7	5.2
TL-350-2C	3.5~15.2													
TL-500-1C	4.8~21.4	500	18	20	18	20	#60-28T	188	105	120	40	76	11.6	12.3
TL-500-2C	9.0~42.9													
TL-700-1C	11.8~58.1	400	23	30	23	30	#80-28T	251	150	168	66	98	15.3	31.0
TL-700-2C	22.8~110.6													
TL-10-16C	40~130	300	33	30	33	30	#140-22T	355	137	189	71	115	26.2	66
TL-10-24C	60~190													
TL-14-10C	90~272	200	38	40	38	40	#160-26T	470	167	235	80	150	30.1	140
TL-14-15C	200~400													
TL-20-6C	250~500	140	43	50	43	50	#160-36T	631	237	300	120	175	30.1	285
TL-20-12C	470~950													